

ABSTRACT OF THE DISCLOSURE

Disclosed are apo-, holo-, and acylated-acyl carrier proteins modified to have a non-radioactive label covalently bonded to a modified tyrosine residue within the acyl carrier protein. Also disclosed are methods of using the labeled acyl carrier proteins to investigate reaction involving or mediated by acyl carrier proteins. Also disclosed are kits containing the non-radioactively-labeled acyl carrier proteins.